CHAPTER 2: ANALYSIS OF EXISTING GENERAL AVIATION SYSTEM

Regional Setting

The SCAG region hosts several of the most active airports in the country. Los Angeles International was ranked as the third busiest commercial service airport in 2000. The Van Nuys Airport is the nation's busiest general aviation airport. There are 57 public-use airports in the region, from international hubs to remote emergency landing fields. Of these, eight are dedicated commercial airports, two are joint-use commercial/military facilities. Two airports offer commuter service. Forty Five are general aviation airports, of which 12 are privately owned public-use airports. The airports are presented in Table 2-1 below and displayed on the next page.

Table 2-1: Regional Airports

Imperial County	Los Angeles County	Orange County	Riverside County	San Bernardino County	Ventura County
Brawley	Agua Dulce	Fullerton	Banning	Apple Valley	Camarillo
Calexico	Brackett	**John Wayne**	Bermuda Dunes	Baker	**Oxnard**
Hatfield Municipal	**Burbank**		Blythe	Barstow	Santa Paula
*Holtville**	Catalina		Chiriaco Summit	Big Bear City	
Imperial County	Compton		Corona	Cable	
Salton Sea**	El Monte		Desert Center	Chemehuevi	
	Fox Field		Desert Resorts	Chino	
	Hawthorne		FlaBob	Hesperia	
	Long Beach		French Valley	Hi-Desert	
	Los Angeles Intl		Hemet-Ryan	Needles	
	Palmdale Regional		**March Inland Port**	**Ontario Intl**	
	Santa Monica		**Palm Springs Intl**	Redlands	
	Van Nuys		Perris Valley	Rialto	
	Whiteman*		Riverside Muni	**SanBern Int'l**	
	Zamperini Field			**SoCal Logistics**	
				Twenty Nine Palms	
				Yucca Valley	

Airports in bold indicate commercial or commuter service
**Airport currently Not Certified by Caltrans*
***Airport Temporarily Closed*

The Federal Aviation Administration uses a method called the Airport Reference Code (ARC) for classifying airports based on the type of aircraft they are designed to accommodate. The ARC is a mix between the aircraft approach (landing) speed and the aircraft wingspan. Airport Categories A and B are grouped for smaller and slower aircraft. Categories C, D and E tend to be used for transport airports with faster aircraft. The categories are further broken down depending upon the weight of the aircraft, types of precision approaches available at the airport and other design factors.

Table 2-2: FAA Airport Reference Code (ARC)

Aircraft Approach Category	Aircraft Approach Speed in knots	Airplane Design Group	Aircraft Wingspan in feet
A	<91	1	<49
B	91-<121	2	49-<79
C	121-<141	3	79-<118
D	141-<166	4	118-<171
E	≥166	5	171-<214
		6	214-<262

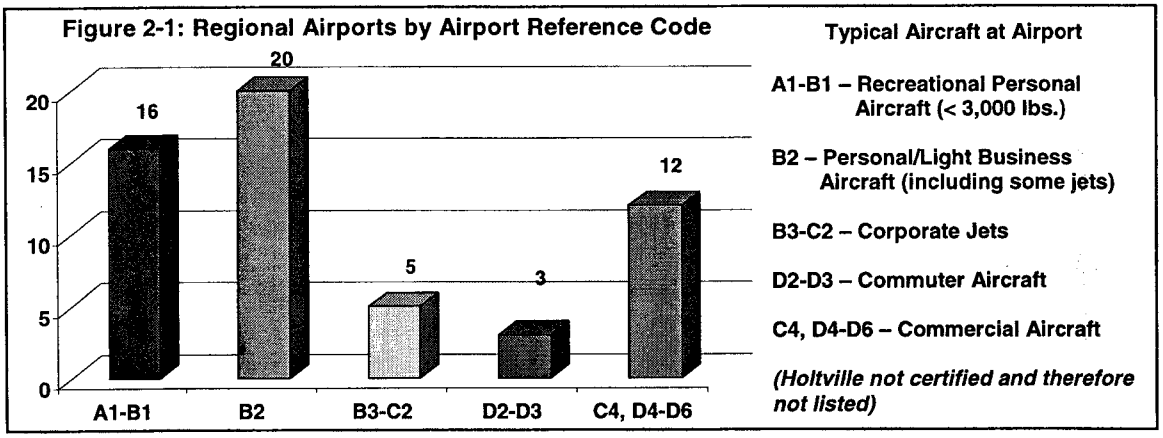
SOURCE: *Horonjeff, McKelvey 1994*

It is important to note that there are other factors besides the airport reference code that determine if an aircraft can operate at an airport, including, but not limited to runway load bearing capacity, local operating restrictions, instrument landing systems, etc.

Figure 2-1 provides an indication of how the region's airports are designed to handle specific categories of aircraft based on the Airport Reference Code.

Sixteen airports are listed as either A1 or B1, suitable for most personal aviation activity (single piston-engine aircraft mostly under 3,000 lb).

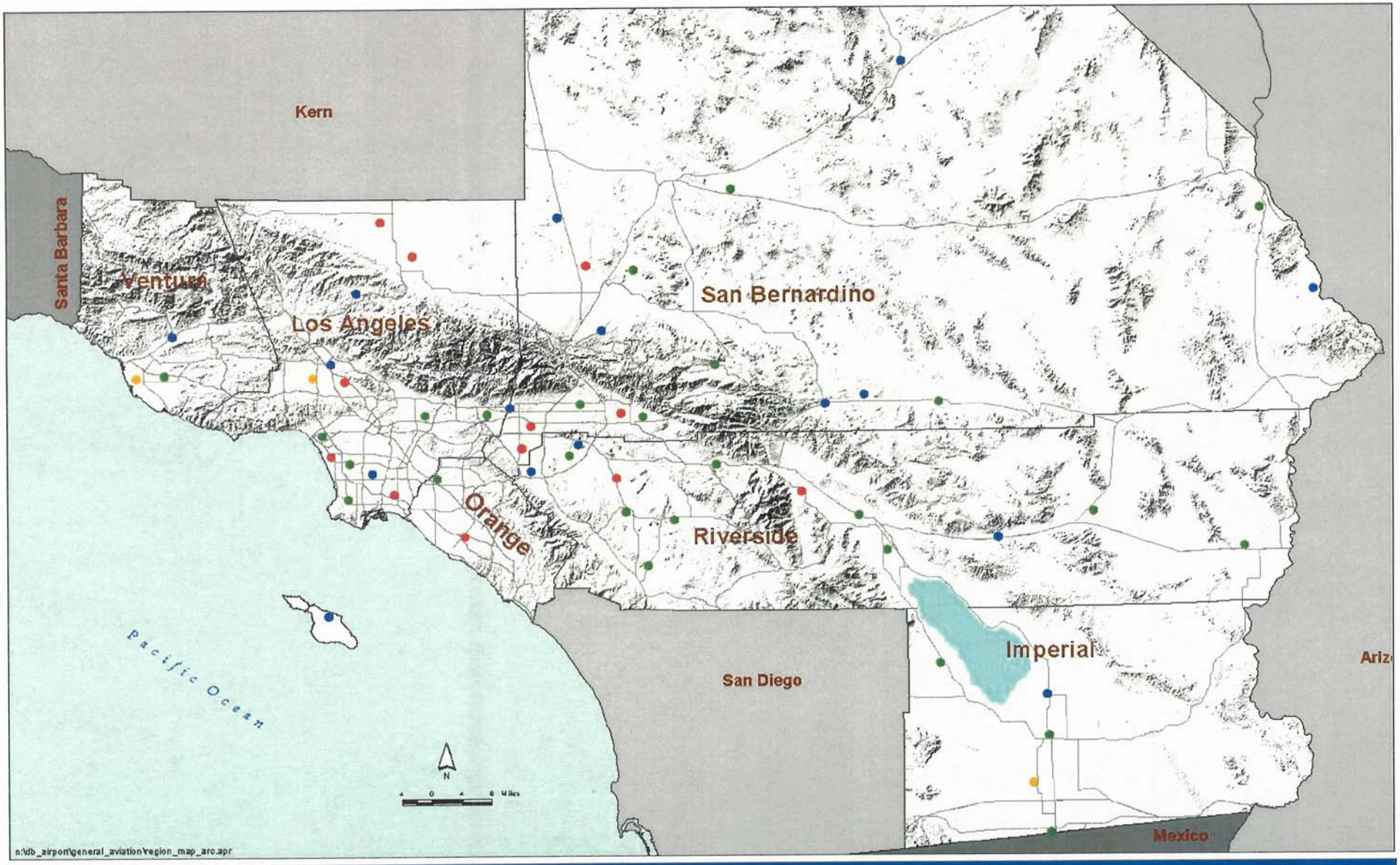
Figure 2-1: Regional Airports by Airport Reference Code



The majority of airports in the SCAG region are categorized as B2 airports. Aircraft design improvements have allowed certain jet aircraft to utilize some B2 airports not originally designed to accommodate them (depending upon individual aircraft and airfield characteristics). These aircraft design improvements are being felt at B2 airports such as Santa Monica, Torrance and Riverside Municipal as their jet aircraft activity increases.

Five airports are in the ARC categories B3-C2, which can comfortably support many business jet aircraft. Airports in this category include Rialto, Hemet-Ryan, Barstow-Daggett (B3), Desert Resorts and Camarillo (C2)

Categories C4 airports include John Wayne airport and Fox Field. These airports can accommodate small to midsize commercial jets.



SCAG Regional Airports

(Sorted by Airport Reference Code)

Figure 2-2

Airport Categories

- Light Personal Aircraft (A1-B1)
- Small Corporate Aircraft (B2-B3)
- Commuter Aircraft (D2, D3)
- Commercial Aircraft (C4, D4-D6)

The D airport categories include all the commercial service airports in the region (Palmdale and March Inland Port haven't been categorized by Caltrans, but it is probable that they would be in the D4 category). Commuter airports such as Imperial County and Oxnard airport are in the D2 and D3 categories respectively. Van Nuys Airport (D2) can support Boeing Business Jets (based on B-737 platform). Chino Airport is rated D4 and can support some commercial aircraft.

Historical Activity

Historical Annual Aviation Operations by County

Year	Imperial	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Totals
1984	128,927	2,473,510	617,124	659,285	751,296	403,197	5,053,339
1993	115,800	2,332,006	552,854	612,084	769,772	362,093	4,744,609
1997	113,152	2,199,752	461,654	629,137	681,962	351,731	4,437,388
2001	101,418	2,346,127	464,152	539,120	748,195	365,932	4,561,294

SOURCE: *airport tabulations and estimates*

Historically, general aviation activity has declined since the 1980s. Much of that can be attributed to the flying retirement of World War Two and Korean War veterans. Various G.I. benefits that promoted flying were discontinued in the late 1970s. Until recently, the costs of buying and insuring an aircraft were becoming prohibitive and most manufacturers were no longer making small recreational aircraft. In the 1990s, a law was enacted limiting manufacturers liability to 18 years after aircraft manufacture. This revitalized general aviation aircraft manufacturing. In addition, coordinated industry sponsored programs designed to promote flying were instituted nation wide. On top of that, corporate aviation, particularly business jet construction, grew tremendously, fueled in part by fractional ownership. The result is that general aviation activity, both regionally and nationwide, grew between 1997 and 2001.